

## ABSTRACT

A mechanism for a bidirectional reservation procedure within an in-band signaling mechanism gives symmetric real-time services running on mobile devices, which are used to support different access technologies in dynamic, mobile, wireless IP networks where the quality of the node connectivity can sometimes be unpredictably time-varying, the possibility to mutually reserve, monitor and adapt resources and service parameters for upstream and downstream direction along a communication path. The mechanism optimizes reservation mechanisms, especially for adaptive real-time services in wireless and wireless ad-hoc networks, by making use of a dynamic bidirectional reservation in-band signaling approach.